## IN THE CLAIMS:

1. (Currently Amended) Method for acquiring a substantially complete depth map from a 3-D scene with the steps of:

a) acquiring at least one image of said 3-D scene using less than three cameras,

a) b) acquiring partial depth map from said 3-D scene at least one image,

b) c) acquiring derivates of depth information from said scene at least one image,

c) d) extending said partial depth map by adding non-relevant information to said partial depth map, creating a pixel dense full depth map being spatially consistent with both said partial depth map and said derivates of depth information.

2. (Original) Method according to claim 1, characterized in that said non-relevant information extending said depth map is calculated by maximizing a probability function containing said non-relevant information, said partial depth map and said derivates of said depth map.

3. (Original) Method according to claim 1, characterized in that said partial depth information and said derivates of depth information is acquired by quantitative image processing.

4. (Original) Method according to claim 1, characterized in that said partial depth information is acquired by detecting a local amount of image texture, and determining depth from spatially high textured areas.

5. (Original) Method according to claim 1, characterized in that said partial depth information and said derivates of depth information is acquired by qualitative image processing.

6. (Currently amended) Method according to claim 1, characterized in that said partial depth information is acquired by object segmentation to determine objects within said at

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least one image and by detecting the ordering of objects.

7. (Original) Method according to claim 1, characterized in that human depth perception is modeled by depth sensors and that said pixel dense full depth map is calculated based on properties of said depth sensors.

8. (Original) Method according to claim 1, characterized in that said pixel dense full depth map is calculated by perturbating pixel values not defined by said partial depth map and said derivates of said depth map and minimizing said probability function.

9. (Previously renumbered) Integrated circuit providing image processing of still and/or motion images said at least one image according to claim 1.

10. (Previously renumbered) Use of a method according to claim 1 in consumer electronics, television and computer vision products.

12. (New) System for acquiring a substantially complete depth map from a 3-D scene, the system comprising:
a) less than three cameras for acquiring at least one image of said 3-D; and,
b) an integrated circuit for providing image processing of said at least one image, said integrated circuit comprising:

     c) acquiring partial depth map from said at least one image,

     d) acquiring derivates of depth information from said at least one image, and

     e) extending said partial depth map by adding non-relevant information to said partial depth map, creating a pixel dense full depth map being spatially consistent with both said partial depth map and said derivates of depth information.

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